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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/791,519

03/02/2004

Andrew E. Gruber

00100.01.0077

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29153 7590 01/22/2009
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EXAMINER

NGUYEN, VAN H

ART UNIT

PAPER NUMBER

2194

MAIL DATE

DELIVERY MODE

01/22/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/791,519	Applicant(s) GRUBER ET AL.	
	Examiner VAN H. NGUYEN	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/07/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to the amendment filed 11/07/2008.

Claims 1-25 are currently pending in this application.

Applicant has amended claims 2 and 7 to overcome the objection. The prior claim objection is withdrawn.

Applicant has amended claim 1 to overcome the 101 rejection. The prior 101 rejection is withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Burke
(US 20040070594 A1).

As to claim 1:

Burke teaches a method for processing command information, the method comprising: detecting a real time event; and causing commands in a real time event command buffer to be fetched and consumed in response to the real time event (see [0062]-[0071], [0223]-[0240],[0294]-[0311], and [0330]-[0354]).

As to claim 2:

Burke teaches providing an event selector signal to a comparator; providing a plurality of event signals to the comparator; and generating an event detection signal when an event signal is equivalent to the event selector signal (see [0062]-[0071] and [0330]-[0354]).

As to claim 3:

Burke teaches providing the commands in the real time event command buffer to be processed by a command processor (see [0062]-[0071] and [0330]-[0354]).

As to claim 4:

Burke teaches the real time event includes a system command from a system command buffer processed by a command processor, the method further comprising: first consuming all of the commands within the event command buffer; and in response to processing all of the commands of the event command buffer, processing a next system command within the system command buffer (see [0062]-[0071] and [0223]-[0240]).

As to claim 5:

Burke teaches detecting a second real time event; and causing commands in a second command buffer to be fetched and consumed in response to detecting the second real time event (see [0062]-[0071] and [0223]-[0240]).

As to claim 6:

The rejection of claim 1 above is incorporated herein in full. Additionally, Burke teaches providing system commands to a command processor from a system command buffer detecting a real time event; fetching commands in an event command buffer in response to the real time event; providing the commands in the event command buffer to the command processor; and consuming the real time event commands by the command processor (see [0062]-[0071], [0223]-[0240],[0294]-[0311], and [0330]-[0354]).

As to claim 7:

Burke teaches providing an event selector signal to a comparator; providing a plurality of event signals to the comparator; and generating an event detection signal when at least one of the event signals is equivalent to the event selector signal (see [0062]-[0071] and [0330]-[0354]).

As to claim 8:

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Burke teaches fetching the system commands from the system command buffer; in response to detecting a real time event, pausing the fetching of the system commands; and upon the processing of all the real time event commands in the real time event command buffer, resuming the fetching of system commands from the system command buffer (see [0062]-[0071], [0223]-[0240],[0294]-[0311], and [0330]-[0354]).

As to claim 9:

Burke teaches detecting a second real time event; fetch commands in a second real time event command buffer; providing the commands of the second real time event command buffer to the system processor; and consuming the second real time event commands by the system processor (see [0062]-[0071], [0223]-[0240],[0294]-[0311], and [0330]-[0354]).

As to claim 10:

The rejection of claim 1 above is incorporated herein in full. Additionally, Burke teaches loading a real time event into a real time event detector; providing a system command from a system command buffer to a command processor; detecting a real time event; fetching commands in the event command buffer; providing the commands of event command buffer to the system processor; and consuming the real time event commands by system processor (see [0062]-[0071], [0223]-[0240],[0294]-[0311], and [0330]-[0354]).

As to claim 11:

Burke teaches providing an event selector signal to a comparator; providing a plurality of event signals to the comparator; and generating an event detection signal when an event signal is equivalent to the event selector signal (see [0062]-[0071] and [0330]-[0354]).

As to claim 12:

Burke teaches loading a second real time event into the real time event detector (see [0223]-[0240] and [0294]-[0311]).

As to claim 13:

The rejection of claim 1 above is incorporated herein in full. Additionally, Burke teaches a command processor for processing system commands from a system command buffer; a real time event engine which monitors a plurality of event signals for a real time event; and an event command buffer, containing a plurality of real time event commands, operably coupled to the real time event engine, wherein when the real time event occurs, the real time event commands are fetched and consumed by the command processor (see [0062]-[0071], [0223]-[0240],[0294]-[0311], and [0330]-[0354]).

As to claim 14:

Burke teaches the first real time event engine comprises: a real time event detector comprising: an event table containing an event selector; a comparator operative to receive the event selector; and a plurality of engines providing the plurality of event signals to the comparator wherein the comparator compares the plurality of event signals to the event selector and produces an event detection signal when at least one of the plurality of event signals matches the event selector (see [0062]-[0071], [0223]-[0240],[0294]-[0311], and [0330]-[0354]).

As to claim 15:

Burke teaches the event table further contains a command buffer pointer and a length of command buffer field wherein the command buffer pointer points to a command buffer and the length of command buffer field provides the number of commands within the command buffer (see [0223]-[0240] and [0294]-[0311]).

As to claim 16:

Burke teaches one of the engines is a three-dimensional video graphics engine (see [0062]-[0071]).

As to claim 17:

Burke teaches the event table is stored in a local command processor memory (see [0062]-[0071] and [0330]-[0354]).

As to claim 18:

Burke teaches a real time event controller which programs the real time event detector with the real time event selector for the detection of the real time event (see [0196]-[0210] and [0330]-[0354]).

As to claim 19:

Burke teaches a second real time event engine which monitors the monitors the commands provided to the command processor for a second real time event; and a second real time event command buffer, containing a plurality of second real time events commands, operably coupled to the second real time event engine, wherein when the second real time event occurs, the second real time commands are fetched and consumed by the command processor (see [0062]-[0071], [0223]-[0240],[0294]-[0311], and [0330]-[0354]).

As to claim 20:

The rejection of claim 1 above is incorporated herein in full. Additionally, Burke teaches a command processor for processing system commands from a system command buffer; a first real time event engine which monitors a plurality of event signals for a first real time event; a first event command buffer, containing a plurality of first real time event commands, operably coupled to the first real time event engine, wherein when the first real time event occurs, the processing of the system commands is paused and the first real time event commands are fetched

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and consumed by the command processor; a second real time event engine which monitors the plurality of event signals for a second real time event; and a second event command buffer, containing a plurality of second real time event commands, operably coupled to the second real time event engine, wherein when the second real time event occurs, the processing of commands by the command processor is paused and the second real time event commands are fetched and consumed by the command processor (see [0062]-[0071], [0196]-[0210], [0223]-[0240], [0294]-[0311], and [0330]-[0354]).

As to claim 21:

The rejection of claim 1 above is incorporated herein in full. Additionally, Burke teaches the first real time event engine comprises a first real time event detector having a first event selector and a first comparator which receives the first event selector; the second real time event engine comprises a second real time event detector having a second event selector and a second comparator which receives the second event selector; and a plurality of engines operably coupled to the first comparator and the second comparator, whereupon when one of the event signals matches the first event selector, a first event detection signal is produced by the first comparator and when one of the event signals matches the second event selector, a second event detection signal is produced by the second comparator (see [0062]-[0071], [0196]-[0210], [0223]-[0240], [0294]-[0311], and [0330]-[0354]).

As to claim 22:

Burke teaches one of the plurality of engines is a three dimensional graphics engine (see [0062]-[0071]).

As to claim 23:

The rejection of claim 1 above is incorporated herein in full. Additionally, Burke teaches a first real time event engine which monitors a plurality of event signals for a first real time event; and a first event command buffer, containing a plurality of first real time event commands, operably coupled to the first real time event engine, wherein when the first real time event occurs, the processing of the system commands is paused and the first real time event commands are fetched and consumed by the command processor (see [0062]-[0071], [0223]-[0240], [0294]-[0311], and [0330]-[0354]).

As to claim 24:

The rejection of claim 1 above is incorporated herein in full. Additionally, Burke teaches a second real time event engine which monitors the plurality of event signals for a second real time event; a second event command buffer, containing a plurality of second real time event commands, operably coupled to the second real time event engine, wherein when the second real time event occurs, the processing of commands by the command processor is paused and the second real

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time event commands are fetched and consumed by the command processor (see [0062]-[0071], [0223]-[0240],[0294]-[0311], and [0330]-[0354]).

As to claim 25:

Burke teaches the second real time event of the second real time event engine is programmed by the first real time event engine (see [0062]-[0071] and [0330]-[0354]).

Response to Arguments

3. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

4. Any inquiry or a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM-6:00PM. If attempts to reach the examiner by telephone are

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unsuccessful, the examiner's supervisor, MENG-AI AN can be reached at (571) 272-3756.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VAN H NGUYEN/
Primary Examiner, Art Unit 2194